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#### **Oceans of Discovery**

By Shelly Leachman September 22, 2014 The UC Santa Barbara Current

When famed ocean explorer Robert Ballard and his research team were exploring the complex seamounts off the British Virgin Islands earlier this month from their ship, E/V Nautilus, a group of Santa Barbara elementary school students was right there with them. Virtually.

Thanks to a 24/7 satellite feed from the Nautilus to the auditorium at UC Santa Barbara's Marine Science Institute (MSI), some 100 fourth-, fifth- and sixth-graders from Adelante Charter School got a peek into Titanic discoverer Ballard's current expedition — and the chance to chat with experts on board.

The program co-hosted by MSI and the Channel Islands National Marine Sanctuary (CINMS) was a pilot event of what UCSB and Ballard, a 1965 alumnus, say will ultimately become a standing feature of the campus's new Outreach Center for Teaching Ocean Science (OCTOS).

"Fishies!" went the cry the moment the stream was live, transmitting real-time underwater action from Hercules, one of Nautilus' remote-operated vehicles (ROV), as it cruised the Anegada Passage. "Good morning, UC Santa Barbara! Hi from E/V Nautilus," came the reply from Ballard team members Kelly Moran and Art Borja.

<sup>&</sup>lt;sup>1</sup> Articles shared specifically mention the sanctuary and/or are related to issues of known interest to the sanctuary advisory council. Any external opinions expressed within these articles do not reflect the views of sanctuary staff or NOAA, and sharing these stories does not indicate staff endorsement of views contained therein.

Over the course of an hour, as they enjoyed a lively Q-and-A session with Moran and Borja, the students caught sight of a host of creatures, including a bobtail squid, a swimming sea cucumber and an octopus, thanks to Hercules. The ROV also found and retrieved a sample from an unidentified rock during the live broadcast.

"We've been diving on underwater volcanoes, exploring them for the very first time," Borja told the kids. "We're seeing what's there, looking at the biology and geology. And we're constantly on the lookout for new forms of life."

Before fate brought Ballard to UCSB, where he majored in chemistry and geology and completed the U.S. Army's ROTC program, he grew up in San Diego. He lived near the ocean, at Pacific Beach, next to the renowned Scripps Institution of Oceanography. Early on, Ballard said, he had his sights set on a marine life.

"As a kid, I wrote a Dear Santa letter to Scripps," he recalled. "'Dear Scripps, I want to be an oceanographer.' They wrote back to me and said they had a program for kids. I was in junior high. That changed my life. I ended up meeting Bob Norris, who was teaching marine geology at UCSB. He invited me to Santa Barbara, I came, and the rest is history. But I saw how important that was — that they had answered my letter.

"When I found the Titanic, I got 16,000 letters from children the first week, asking 'Can I do what you do?' and 'How can I be you? What do I have to do?'" Ballard continued. "That's what led me to doing these live broadcasts. It's hard to ignore 16,000 letters when I wrote one of those myself as a kid. And I really enjoy sharing my experiences."

Which is why Ballard is teaming with his alma mater and the National Oceanic and Atmospheric Administration's CINMS to bring his education-aimed broadcast program — Nautilus Live, as it's known — to campus as a regular offering of OCTOS, once the center is up and running. UCSB is leading an ongoing \$10 million capital campaign to design and complete state-of-the-art educational exhibits, such as an interactive virtual dive display and an immersive theater, planned at OCTOS.

"We want Santa Barbara to think of the Nautilus as theirs, because it is," said Ballard, a newly elected trustee of the UC Santa Barbara Foundation. "We want people from UCSB and the Santa Barbara community — students, teachers, educators, scientists — all to say, 'That's my ship.'"

UCSB wants its campus and greater communities alike to feel the same way about OCTOS, which will serve as an extension and expansion of current outreach efforts, according to MSI's Scott Simon.

"OCTOS will leverage the collective resources of MSI and the National Marine Sanctuary to build a more robust program, including our touch tanks, lab experiences, and the telepresence experience with Bob Ballard's Nautilus Live," Simon said. "This dovetails very nicely with what we're already doing. And how cool is it for local kids to come to college for a day and get that experience right here at UCSB?"

Very cool indeed, by all indications.

The recent Nautilus Live session with Adelante Charter School — kids asked the scientists about everything from what they eat on board to how it feels to find a shipwreck — culminated with some parting words for the students from Ballard himself.

"Deep ocean exploration is important for our planet's future," Ballard said. "I can't think of anything better than having you come with me and letting you experience it. [With Nautilus Live], you can come aboard the ship and see it as it's happening. You can say, 'I was there.'"

When the program concluded, emcee Simon asked his young crowd, "So does anybody want to be a marine biologist now?"

"Me!" shouted several voices.

"I want to be an ROV pilot!" said another, just before someone else declared, "I want to be everything!"

And there's the payoff. In addition to witnessing potential new discoveries underwater, the students may also have found something unexpected in themselves, according to teacher Paula Sevilla.

"Anytime we can get the kids — either literally or through technology — out of their own worlds to see other things, I think we allow them to dream about something they didn't know was possible, and I think that's incredibly valuable," said Sevilla, who heads a fourth-and-fifth-grade combination class at the Spanish-English immersion school. "I think they'll take this with them. I think it will help them push through barriers and obstacles. And I think it will not only help their current learning about ecosystems but also to continue on and fight for their futures."

# Obama to Create World's Largest Protected Marine Reserve in Pacific Ocean

By Juliet Eilperin September 25 The Washington Post

President Obama will use his legal authority Thursday to create the world's largest fully protected marine reserve in the central Pacific Ocean, demonstrating his increased willingness to advance a conservation agenda without the need for congressional approval.

By broadening the Pacific Remote Islands National Marine Monument from almost 87,000 square miles to more than 490,000 square miles, Obama has protected more acres of federal land and sea by executive power than any other president in at least 50 years and makes the area off-limits to commercial fishing.

The proclamation — which Secretary of State John F. Kerry announced during an oceans meeting he convened in New York on Thursday — will mean added protections for deep-sea coral reefs and other marine ecosystems that administration officials say are among "the most vulnerable" to the negative effects of climate change. The document signed by Obama noted that the expanded area contains "significant objects of scientific interest that are part of this highly pristine deep sea and open ocean ecosystem with unique biodiversity."

"We have a responsibility to make sure our kids and their families and the future has the same ocean to serve it in the same way as we have — not to be abused, but to preserve and utilize," Kerry said at the session, a follow-up to the global ocean conference he held in June. "And we're talking about an area of ocean that's nearly twice the size of Texas, and that will be protected in perpetuity from commercial fishing and other resource-extraction activities, like deep-water mining."

While the new designation is a scaled-back version of an even more ambitious plan the administration had floated in June, it marks the 12th time Obama will have exercised his power under the 1906 Antiquities Act to protect environmental assets. The decision to continue to allow fishing around roughly half the area's islands and atolls aims to limit any economic impact on the U.S. fishing interests.

President Obama wants to use his executive authority to protect more of the Remote Pacific Islands National Marine Monument. Here is footage from already-protected areas in the Palmyra Atoll and Kingman Reef, courtesy of National Geographic. (Editor's note: Music added by PostTV.) (National Geographic)

The unilateral move comes as the administration has found it nearly impossible to achieve many of its other domestic priorities. Consumed by foreign crises and blocked legislatively at home by congressional Republicans, the president and his aides have worked methodically to pursue their environmental objectives through executive action.

Even as it uses its authority to expand a monument first established by George W. Bush in 2009, the White House is preparing to act under the same law to designate national monuments in Chicago's historic Pullman district and the San Gabriel mountain range northeast of Los Angeles.

"I hope we're at a tipping point," said Kristen Brengel, senior director of policy for the National Parks Conservation Association, noting that many of the bills aimed at creating parks and wilderness areas are stalled on Capitol Hill. "It's every community's right to go to the president and say, 'We just can't get this passed by Congress, can you step in and help us there?' "

White House counselor John D. Podesta made it clear during a dinner last week celebrating the 50th anniversary of the Wilderness Act that Obama was eager to designate additional national monuments before leaving office. Obama still trails many of his predecessors when it comes to using the Antiquities Act: Bill Clinton created 23 national monuments, according to the NPCA, while Franklin D. Roosevelt designated 22.

"And believe me, believe me, his signing pen still has some ink left in it," Podesta said, drawing applause from activists in the audience.

Rep. Rob Bishop, who chairs the House Natural Resources subcommittee on public lands and environmental regulation, said in an interview that the president has stretched the intent of a law designed to protect archeological treasures and "doing it in a roughshod way, with no appreciation for the people who actually know anything" about the sites in question.

"He is using the Antiquities Act not to save or preserve anything, but as a political weapon before the election," Bishop said, adding that his committee sought to advance wilderness bills but encountered resistance from Democrats who objected to provisions that allowed motorized vehicles in some areas.

Under the new designation, the administration will expand the fully protected areas from 50 miles offshore from three remote areas — Johnston Atoll, Wake Atoll and Jarvis Island — to 200 miles, the maximum area within the United States' exclusive economic zone. The existing, 50-mile safeguards around Kingman Reef and Palmyra Atoll, as well as Howland and Baker islands, which are also part of the existing monuments, will not change.

Obama has protected 297 million acres of federal lands and waters through executive action, surpassing George W. Bush, who safeguarded 211 million acres.

While the islands in question are uninhabited, U.S. tuna operators and some officials in Hawaii and American Samoa have opposed the expansion on the grounds that it could make it more difficult to catch tuna and other species at certain times of year. Fish caught in the area around all seven atolls and islands account for up to 4 percent of the annual U.S. tuna catch in the western and central Pacific, according to the Pew Charitable Trusts.

Sean Martin, president of the Hawaii Longline Association who organized a bus to bring in about 100 fishermen to a public meeting on the proposal in Hono-Iulu last month, said the operators of 145 boats that fish in the region want "the opportunity to go where the fish are, hopefully."

And Claire Poumele, director of the American Samoa Port Authority, said she was concerned about the \$600 million worth of fish her territory processes each year: "It definitely could have an impact," Poumele said.

But scientists and conservationists who have lobbied for the bigger monument argue that these vessels can catch tuna outside the protected zone and that it provides shelter not only for 130 underwater mountains that serve as hot spots for biodiversity but for nearly two dozen species of marine mammals, five types of threatened sea turtles, and a variety of sharks and other predatory fish species.

Referring to the three adjacent areas that will now have more restricted activities, the presidential proclamation states, "These adjacent areas hold a large number of undersea mountains ('seamounts') that may provide habitat for colonies of deepwater corals many thousands of years old," adding that their "pelagic environment provides habitat and forage for tunas, turtles, manta rays, sharks, cetaceans and seabirds that have evolved with a foraging technique that depends on large marine predators."

"If you put aside the emotion and put aside the rhetoric on both sides, less than 3 percent of the Pacific is in under effective protection," University of Hawaii professor Robert H. Richmond said.

Marine Conservation Institute chief scientist Elliott Norse, who has been conducting underwater research since 1969, said "the seas have been emptied," adding the point of the Antiquities Act is "about having places in our realm where we don't kill off the wildlife."

Matt Rand, who leads the Pew Charitable Trust's Global Ocean Legacy project, said that because more than half-a-dozen other nations are considering creating new protected areas in the Pacific, "This could be the wave that ultimately propels these marine reserves to become reality." Taken together with the U.S. announcement, these areas could encompass more than 2.3 million square miles of sea.

#### **Hidden Danger of Fishing Line and Hooks**

Sep 29, 2014 Erika Mahoney KION News

One of the many sea lions who lives at the Monterey Coast Guard Pier has a bad injury that makes him stand out.

In early September, the Marine Mammal Center rescued him after fishing line got wrapped around his neck. About three weeks later, the cuts around his neck are still visible.

"So he was one of the lucky ones," Kim Worrell with Bay Net said. "He was actually rescued and released. But again, so many of them are not caught, and end up dying from these entanglements."

Volunteers pegged the Coast Guard Pier as a problem spot for this about three years ago.

"I don't know if it's gotten worse, but it hasn't gotten better," Marge, with Bay Net, said.

Marge said in July alone, she collected 243 hooks. On Sunday, she collected at least four, plus a very large line on the pier.

Last year, volunteers added recycling bins along the fence, reminding anglers to recycle their hooks and line. Then, in May, volunteers started handing out personal recycling containers made out of old tennis ball containers that can be brought to and from the pier.

But even with these efforts, the problem persists. So, on Sunday, volunteers and the Coast Guard set up tents at the entrance of the pier to have face-to-face conversations to get the word out.

"We just want people to know that we want them to enjoy the Coast Guard Pier, and we like having them come down, but we also want to look out for the marine wildlife that's in the area," Executive U.S. Coast Guard Officer Taylor Smith said.

Fisherman Timothy Fridell, who just started fishing at the pier, says it's easy to make a difference -- anglers just need to remember to account for everything they bring before they leave.

"The Coast Guard Pier is a great pier. We have the sea lions down at the end, we have sea otters swimming by here everyday -- all the birds and little creatures. We have to take care of them," Fridell said.

Bay Net, NOAA, SPCA Wildlife Center, Marine Mammal Center, National Marine Sanctuary and USCG/ Auxiliary all participated in the event.

#### \$500,000 Gift Creates an Ocean of Opportunity for Marine Bio

The Bottom Line By Judy Lau October 1, 2014

A gift of \$500,000 from the Bentson Foundation will be used to fund the Bentson Scholars Program, a merit-based initiative for undergraduates with a keen interest in marine science. This program is a passion project for Gaucho alumnus Laurie Bentson Kauth, chair of the foundation, and her husband William Kauth, a retired marine biology teacher from Santa Barbara High School.

"When Bill was teaching, there was a sort of unofficial collaboration between his class and UCSB—they visited the campus labs quite often—and it was wonderful," Bentson Kauth recalled. "With the Bentson Foundation we have scholarships other places, so bringing one here seemed like the perfect thing to do. And we're really excited about it."

For UCSB's EEMB department, the hope is that the Bentson scholarships will provide aquatic biology students the opportunity to do invaluable research and further their marine science education. Participating in a research cruise is an experience that will set UCSB students apart from the rest when applying for jobs or graduate school.

"This looks like a win-win for students supported by the scholarships and the faculty working with these outstanding students," said Professor Craig Carlson, chair of UCSB's EEMB department. "It will create opportunities for undergrads and help them excel in this important field."

For the Bentson Foundation—an organization prioritizing public education—the partnership made perfect sense. This is the foundation's first gift to UCSB and to the UC system.

"We are pleased to support UCSB in this manner and foster future leaders in marine science, who we believe will play a critical role in protecting the world's oceans," said Judi Dutcher, the Bentson Foundation's executive director. "We hope not only to grow this program at UCSB but also to inspire other donors to create a legacy of support for students that attend this important institution."

In addition to this scholarship program, UCSB is home to an Ocean Science Education Building, which houses the new headquarters for the National Oceanic and Atmospheric Administration's (NOAA) Channel Islands National Marine Sanctuary.

"The Channel Islands National marine Sanctuary is one of our nation's great ocean treasures," said Holly A. Bamford, Ph.D, NOAA's assistant administrator for the National Ocean Service. "Not only will the new building be home to Channel Islands Sanctuary office, it will enhance how we collaborate with the university and dramatically advance our efforts in research, education and marine conservation."

Half of the building serves as sanctuary offices where the NOAA can stay on the cutting edge of science and management. The other half of the building will house the Outreach Center for Teaching Ocean Science (OCTOS), a joint project of UCSB's Marine Science Institute. The sanctuary will offer ocean conservation programs and marine science education to over 40,000 students annually.

With the recent addition of a new marine science building in UCSB and the new Bentson Scholarship program, students within the EEMB department are able to take full advantage of the school's resources to further their interest in aquatic biology and marine science while gaining invaluable research experience.

"We hope these students go on to help save the ocean, which is really the reason that you study marine biology. And certainly UCSB is one of the very best places to do that," said Bentson Kauth, whose parents, Larry and Nancy Bentson, founded the Bentson Foundation in 1956. "Hopefully they will be so inspired that they will eventually give back to UCSB, too. That's the whole idea."

#### **U.S. to Gauge National Marine Biodiversity**

BY MAREX October 7, 2014

The Bureau of Ocean Energy Management (BOEM) plans to join NASA and the National Oceanic and Atmospheric Administration (NOAA) in supporting an initiative that will lay the foundation for the first national network to monitor marine biodiversity at scales ranging from microbes to whales.

The projects, funded at approximately \$17 million over the next five years, subject to the availability of funds, will demonstrate how a nationally operational marine biodiversity observation network could be developed. Such a network would serve as a marine resource management tool to conserve existing biodiversity and enhance U.S. biosecurity against threats such as invasive species and infectious agents.

Three demonstration marine biological observation networks will be established in four locations: the Florida Keys, Monterey Bay and the Santa Barbara Channel in California, and in the Chukchi Sea in Alaska.

Marine biodiversity is a key indicator of ocean health and critical to sustaining natural resources such as fisheries. The three projects that encompass this initiative, selected from 19 proposals, will be established in different marine environments in U.S. waters to integrate existing observations, ranging from satellite observations to DNA sampling, and fill data gaps with new observations.

This joint effort supports the U.S. National Ocean Policy to "protect, maintain, and restore the health and biological diversity of ocean, coastal, and Great Lakes ecosystems and resources." An integrated picture of what is happening to marine biodiversity enhances the ability of policymakers and natural resource managers to devise effective strategies to address ecosystem threats from pollution and climate change.

The pilot research program is sponsored under the National Oceanographic Partnership Program, which facilitates joint funding of projects of mutual interest to different institutions in an effort to avoid duplication of research efforts.

"We now have large amounts of biologically relevant information on marine ecosystems, including global observations of ocean color and sea surface temperature from space," said Woody Turner, manager of NASA's Biodiversity Research Program at NASA Headquarters in Washington. "But we need a more effective way of combining different types of information to get a better picture of how marine ecosystems are changing if we are to sustain these important ecosystem resources."

The networks will integrate data on large-scale sea surface conditions observed by NASA, NOAA, and U.S. Geological Survey satellites with observations made in the ocean and the laboratory. They will build partnerships with existing long-term biodiversity monitoring efforts, explore innovative uses of new in situ observations and genomic techniques, and improve access to integrated biodiversity data.

"BOEM is pleased to continue its long history of monitoring offshore areas as part of its mission to assess environmental risk and develop mitigation measures to protect coastal and marine ecosystems," said BOEM Acting Director Walter Cruickshank, in Washington. BOEM plans to contribute financially to the Santa Barbara Channel and Alaska projects.

Biodiversity within two NOAA national marine sanctuaries in Florida and California is the focus of the project led by Frank Muller-Karger of the University of South Florida, St. Petersburg, and Francisco Chavez of the Monterey Bay Aquarium Research Institute in California. The Florida Keys and Monterey Bay national marine sanctuaries encompass a wide range of marine environments, including deep sea, continental shelves, estuaries, and coral reefs.

The third sanctuary in the project, Channel Islands National Marine Sanctuary, which surrounds California's Channel Islands off the Santa Barbara coast, is the focus of the project led by Robert Miller of the University of California, Santa Barbara. The Channel Islands are one of the most monitored marine areas in the world.

"NOAA's marine sanctuaries are an ideal setting to test and evaluate a biodiversity network prototype," said NOAA's Zdenka Willis, director of the U.S. Integrated Ocean Observing System, Silver Spring, Md. "These areas encompass a wide range of marine environments as well as nearby coastal communities that depend on the ocean for business and recreation. By linking federal and non-federal partners, we

hope this network will help us better understand these ecosystems and serve to inform emergency response systems for environmental threats such as invasive species."

The U.S. Arctic continental shelf off the northwest coast of Alaska is the focus of the project lead by Katrin Iken, University of Alaska Fairbanks. The Arctic is experiencing the most dramatic temperature increases taking place in the ocean, leading to significant changes in marine ecosystem structure and function. This Arctic marine biodiversity observing network will continue recent efforts to extend much-needed long-term monitoring data and fill gaps in coverage. In addition, Shell is contributing a significant portion of the Alaska study under the partnership.

NASA monitors Earth's vital signs from land, air and space with a fleet of satellites and ambitious airborne and ground-based observation campaigns. NASA develops new ways to observe and study Earth's interconnected natural systems with long-term data records and computer analysis tools to better see how our planet is changing. The agency shares this unique knowledge with the global community and works with institutions in the United States and around the world that contribute to understanding and protecting our home planet. NASA's Biodiversity Research Program utilizes satellite observations and computer models to improve our understanding of biodiversity -- the variety of life at all levels ranging from genes to species and ecosystems -- and the role of life in the Earth system.

#### **Dolphin Washes Up on Beach Near Ventura County Line**

By Megan Diskin and Mercedes Aguilar Oct. 18, 2014 Ventura County Star

Officials confirmed Sunday the carcass that washed up on a local beach was a dolphin.

The dolphin was an adult Risso dolphin that was extremely decomposed, said Jim Milbury, a spokesman with the National Oceanic and Atmospheric Administration.

Risso dolphin are one of the largest dolphins and can weigh from 600 pounds to over 1000 pounds, Milbury said.

The dolphin was expected to be buried deep in the sand and to continue decomposing, Milbury said.

A woman who lives in the area of the beach near the Los Angeles/Ventura county line said she saw the dolphin, which at the time appeared to be a small whale, about 10 a.m. Saturday. She said she notified a ranger at nearby Leo Carrillo Beach after finding the 10-foot-long carcass as she was running along the beach just north of 41000 Pacific Coast Highway.

"It was pretty stinky and bloated," she said.

The body of a 52-foot fin whale floated into port at Naval Base Ventura County Port Hueneme in July. NOAA officials conducted a necropsy and found the cause of death was most likely blunt-force trauma consistent with a ship strike.

According to NOAA, shipping lanes and migratory paths of blue, fin and humpback whales overlap in the Channel Islands National Marine Sanctuary. As a result, there is a risk of ship strikes to whales that can cause serious injury or death.

## **New Boat a Boon for Ghost Net Rescue Group**

By Asher Klein October 6, 2014 The OC Register

It isn't unheard of that the divers of the Ocean Defenders Alliance return from the ocean floor more or less empty-handed, as they did Saturday. But the day's expedition wasn't a waste.

They had another mission in addition to recovering the abandoned fishing gear that continues to catch sea creatures. Publicity is part of the job, too, or else they wouldn't attract big donors, and Kurt Lieber, the captain, has a new boat to show off, paid for in large part by Bob Barker.

"If you don't, people don't comprehend what you're doing," said Lieber, founder of the group. "While we're out here we might as well do it."

So after lunch, three volunteers took off in a small inflatable speedboat to take photos of the new, surprisingly luxurious and relatively pristine boat, called the Mr. Barker's LegaSea. It was paid for in part by a \$150,000 donation from Barker, the animal rights-advocating former host of "The Price is Right."

It's a huge upgrade over the group's old boat, the Clearwater, said Leibier, also the director of the Huntington Beach-based ghost net rescue group. The LegaSea can bunk up to eight, letting Ocean Defenders take gas-saving overnight trips to the Channel Islands or San Diego, and everyone onboard was grateful to the donors for assisting their conservation mission.

"I love the ocean, and it needs help," said Lieber, who wants to restore the depleted stock of big fish in the ocean. "We're hoping we can make a difference in Southern California."

Ocean Defenders Alliance is combating a problem that's attracting growing concern around the globe.

Abandoned fishing gear can last for hundreds of years and continues to do its job long after it has been cut loose from a boat, or settle in a wreck, even though no fisherman's going to haul in its catch. It can ripple up and down the food chain in the area near the net: Ocean Defenders divers once found 22 dead sea lions in a net, likely attracted to it by snagged fish.

"They're deadly, absolutely," Barker said in a phone interview.

"They're doing great work and so are other organizations, at long last, because those nets have been there for years," Barker said.

Because so much of the ocean floor remains unexplored, there's no reliable figure for how much lost

gear is out there, but it could be massive.

Lobster fishers in the Florida Keys reported losing 63 percent of their traps in 2005, when four hurricanes swept through the Gulf Coast, according to National Oceanic and Atmospheric Administration, which would mean hundreds of thousands of traps were loose and could still be fishing. In 2011, more than 2,000 nets were recovered from the Gulf of Carpentaria in the north of Australia, where currents carry snagged trawl nets from ships fishing in Indonesian waters, according to a 2013 study published in the Journal of Environmental Management.

On the LegaSea's first trip for Ocean Defenders, divers recovered five loose lobster traps near the entrance to Anaheim Bay in Seal Beach, including one full of 33 live lobsters that Lieber suspects was set illegally by poachers – it wasn't marked like permitted traps.

Saturday's return to the location only yielded a couple of finds, two traps too buried to be recovered. But divers were able to free three living lobsters and one dead one from them.

"There was a dose of cannibalism going on in one of the traps," said diver Jeff Connor, 56.

The divers loved the new boat, which they all said was a huge upgrade on the Clearwater, a decommissioned Canadian Coast Guard vessel that Ocean Defenders still keeps, in Oxnard.

The 55-foot former luxury boat, for now equipped with a washer/dryer and comfy leather chairs, has such critical innovations as a diving platform, shower and powered hoist that can deploy the LegaSea's speedboat and raise recovered nets or traps out of the water. It's also faster and less polluting.

Being able to make overnight trips is probably the biggest step up the LegaSea provides, since the long distance and subsequent fuel costs to the islands off California's coast has made repeat trips prohibitively expensive. Staying one or two nights would give the divers, who bring their own gas tanks on the trips, a chance to thoroughly pick over dive sites.

"I can't wait to sleep on this thing," said diver Peter Folks, who also shoots video for the Alliance.

There still are kinks to be worked out. The boat needs upgraded radar and electrical systems (beyond the stereo Lieber installed), and a cable snapped when the crew lowered the speedboat into the water.

"You're really not boating unless you're breaking stuff," said Folks, 28.

The LegaSea isn't the first ocean-going vessel to be named for Barker, who was well-known for closing episodes of "The Price is Right" by asking viewers to have their pets spayed or neutered. He has a nonprofit, the DJ&T Foundation, that supports animal and neutering programs, and other animal rights causes beyond that.

A large donation to the Sea Shepherd Conservation Society helped the conservation group buy a ship it uses to track the fleet of Japanese whalers. The ship is named the MY Bob Barker, and Barker said he's pretty proud of that.

"I tell folks that a lot of guys in Hollywood have boats. Some of them have yachts, but I have a ship," the 90-year-old said.

The LegaSea isn't a ship, Barker noted, "but it's still a nice boat. A sleek-looking boat. It looks much more sleek than I do."

### New Report Points to Benefits of National Marine Sanctuary Designation for Central Coast

By Sierra Club California Oc.t 30, 2014

San Luis Obispo, Calif. – A new report released today points to the economic benefits that would come to California's Central Coast, and particularly San Luis Obispo County, if the region were to receive National Marine Sanctuary designation. The report finds that if the San Luis Obispo County coastline were designated as a National Marine Sanctuary, the region could expect increased economic activity of more than \$23 million annually as well as the creation of at least 600 permanent local jobs.

"The Potential Economic Impacts of the Proposed Central Coast National Marine Sanctuary" was prepared by Jason Scorse, Ph.D., Director of the Center for the Blue Economy at the Monterey Institute of International Studies (a Graduate School of Middlebury College) and Judith Kildow, Ph.D., director of the National Ocean Economics Program at the Center. Sierra Club California commissioned the report in response to an announcement earlier this year that the National Oceanic and Atmospheric Administration (NOAA) will begin considering new areas for National Marine Sanctuary designation for the first time since 1995.

"In most of the 14 current National Marine Sanctuaries, tourism is one of the largest sectors of the local economy. Millions of visitors are drawn to these areas for their beaches, recreational fishing, diving, snorkeling, surfing, wildlife viewing, and museums and aquariums," Dr. Scorse and Dr. Kildow noted in their report.

Michael Thornton, an organizer with Sierra Club California, said, "San Luis Obispo has long been identified as a prime candidate for sanctuary designation. It sits nestled between the Channel Islands and Monterey Bay sanctuaries. Including this coastal region in the sanctuary system would provide an important connected stretch of coastline essential to the well-being of a wide variety of aquatic mammals, birds and other sea life. A healthier ocean benefits all of the species, including humans, that depend on it for their lives and livelihoods."

Drivers for increased economic activity that accompany sanctuary designation include direct government expenditure on staffing, likely grant funding associated with research that would be conducted in the region and projected tourism-related revenue likely to be generated by the attractiveness of a protected coastline for recreational activities.

California has four National Marine Sanctuaries. The Channel Islands Sanctuary is far from the mainland in Southern California, the Monterey Bay Sanctuary is adjacent to a large population with a robust tourist economy, and Cordell Bank and the Gulf of the Farallones Sanctuaries are directly adjacent to each other and border much less dense populations. The report evaluated documented economic stimulus provided by each of these sanctuaries to estimate the likely economic benefits that would come to San Luis Obispo if it is successful in securing the designation.

NOAA announced in June that it is now approaching the process for identifying National Marine Sanctuaries in a new way. For a region to be considered for designation, a community must present its case to NOAA about why the nominated region is worthy of sanctuary status. Sierra Club is supporting the effort of local activists, businesses, and coastal tribes in making the case for sanctuary designation of the San Luis Obispo coastline.

The proposed sanctuary area, which also includes parts of northern Santa Barbara County, is home to kelp forests, the southern sea otter, gray whale migration routes and one of the most sustainable fisheries in the country including rock fish, salmon, sole, swordfish, and hundreds of non-commercial species. It also provides an important stopping point along the Pacific Flyway for migratory birds. The cold water off the coast and fresh water estuaries onshore make it an important nursery for a wide range of species. Offshore oil drilling, water pollution, seismic testing, and climate change all pose threats to the integrity of this diverse and valuable natural area.

Exploration for and production of oil, gas and minerals are banned in areas that are granted sanctuary designation. Regulations that govern economic activity that works in concert with the natural ecosystem, such as commercial fishing and recreational tourism, would be unaffected by a National Marine Sanctuary designation.

In the coming months, Sierra Club and other supporters will ask the San Luis Obispo Board of Supervisors to pass a resolution in favor of sanctuary status. A formal application is expected to be submitted to NOAA in the coming months.